

BIDZHIYEV, R.A.

Studying slanting stratification in lower Jurassic continental
deposits along the Anga River in the Yakut A.S.S.R. Trudy VAGT
no.2:180-182 '56.
(Anga Valley--Geology, Stratigraphic) (MLRA 10:5)

BIDZHIYEV, R.A.

New data on the tectonic structure of the Cis-Verkhoyansk Depression. Dokl. AN SSSR 111 no.2:407-409 N '56. (MIRA 10:1)

1. Vsesoyuznyy aerogeologicheskiy trest Ministerstva geologii i
lichrany nedr SSSR. Predstavлено академиком Н.С. Шаткиным.
(Verkhoyansk Range--Geology, Structural) (Lena Valley--Geology,
Structural)

BIDZHIYEV, R.A.; KARAVAYEV, M.N.

Recent materials on Neogene deposits of central Yakutia; the
problem of Mount Mamontova. Vest.Mosk.un.Ser.biol., pochv., geol.,
geog. 14 no.4:117-124 '59.
(MIRA 13:6)

1. Kafedra paleontologii i geobotaniki Moskovskogo universiteta.
(Aldan Valley--Geology, Stratigraphic)

3(5)

AUTHOR:

Bidzhikov, R. A.

SOV/20-127-2-46/70

TITLE:

On a Quaternary Depression in the South-eastern Part of the
Priverkhoyanskiy Border Downwarping

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 398-401
(USSR)

ABSTRACT:

In the course of the geological and geomorphological area surveys in Central Yakutiya (1950) an immense area of arenaceous-argillaceous and arenaceous sediments was discovered for the first time in the Lena-Amga interfluvial region. These sediments fill up a recent depression, mainly in the zone of the Nizhne-Aldanskaya foothill depression (Ref 1). This mass was extracted by boring or mining. It is a complex of formations of extremely complicated structure of an alluvial lake genesis and of Lower, Middle Quaternary age respectively. Loess-like and carbonate argillaceous rocks, partly in considerable quantities, partly predominant, are characteristic here. They have, as a rule, not distinctly marked texture characteristics. G. F. Lungersgauzen determined from several bore-holes a stunted lake fauna with thin mussel shells. At one place an ice lentil of 21 m thickness was pierced (depth 29-50 m). Fossil ice

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occurs also in upper layers. The above Quaternary complex rests upon various sediment horizons of Cretaceous, Jurassic, and Cambrian. Basalt conglomerate occurs often on its base. The distribution region of the said alluvial sediments has a characteristic relief: (a) the alluvial lake sediments have mainly an Alas relief (Alas - a caldron depression with meadow vegetation, often with smaller lakes, formed by depressions in consequence of the melting of buried ice) with absolute elevations of 220-240 m and lower (in the north) and 270-280 m and more (in the south). (b) the region of the "Bestyakhskaya" terrace has a much more balanced relief. The delimitation of the formations (a) is difficult since they occur on the right bank of the river Aldan as well (Fig 3). They lack completely on the left bank of the river Lena. The total character of the hypsometry of the sole of the mentioned Quaternary mass (Fig 1) was explained by bore drilling. It is sufficiently complicated (Figs 1-3). The configuration of the distribution region of the complex discussed here, the peculiar hypsometry of its sole, and the considerable thickness (20-130 m) lead to the assumption that depressions of the earth's surface occurred in Quaternary

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in the interfluvial region of the rivers Lena, Amga, and Aldan. These formed a recent tectonic depression which inherited its development from Tertiary, i.e. from the formation time of the lower Aldan foothill depression. This depression is assumed to be a migrating element in the total depression of the region (Figs 1 and 2). Transversal local elevations in the Verkhoyan'ye and Priverkhoyan'ye are assumed to be the reason of this transversal depression (Ref 2). There are 3 figures and 2 Soviet references.

ASSOCIATION: Vsesoyuznyy aerogeologicheskiy trest (All-Union Aerogeological Trust)

PRESENTED: February 13, 1959, by D. V. Nalivkin, Academician

SUBMITTED: February 4, 1959

Card 3/3

NEVYAZHSKIY, I.I.; BIDZHIYEV, R.A.

Aeolian relief forms in central Yakutia. Izv.AN SSSR.Ser.
geog. no.3:90-95 My-Je '60. (MIRA 13:6)

1. Vsesoyuznyy Agrogeologicheskiy treat.
(Yakutia--Sand dunes)

BIDZHIYEV, R.A.

Facies of Oligocene coal-bearing sediments in the lower Aldan
Valley (central Yakutia). Izv. vys. ucheb. zav.; geol. i razv.
3 no.7:31-41 Jl '60. (MIRA 13:9)

1. Moskovskiy gosudarstvenny universitet im. M.V.Lomonosova.
(Aldan Valley--Coal geology)

BIDZHIYEV, R.A.; MINAYEVA, Yu.I.

Stratigraphy of Jurassic sediments in the northern fault of the
Verkhoyansk piedmont region. Geol. i geofiz. no.11:47-62 '61.

(MIRA 15:2)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Verkhoyansk Range--Geology, Stratigraphic)

BIDZHIYEV, R.A.; MINAYEVA, Yu.I.

Sources of drift during the formation of lower Jurassic continental deposits in central Yakutia (basin of the Anga River). Dokl. AN SSSR 136 no.2:412-415 '61.
(MIRA 14:1)

1. Vsesoyuznyy aerogeologicheskiy trest. Predstavлено академиком A.L. Yanshinym.
(Anga Valley—Drift)

MINAYEVA, Yu.I.; BIDZHIYEV, R.A.

Middle Paleozoic weathering surface in the northeastern part of
the Siberian Platform. Trudy VAGT no.8:21-24 '62. (MIRA 15:11)
(Siberian Platform--Weathering)

BIDZHIYEV, R.A.; MINAYEVA, Yu.I.

Source material in the formation of Jurassic sediments in the northern Verkhoyansk piedmont and the adjacent part of the Vilyuy syneclide. Trudy VAGT no.8:42-49 '62. (MIRA 15:11) (Verkhoyansk range region--Petrology)

BIDZHIYEV, R.A.

Distribution of "minor" chemical elements in the Jurassic
Lower and Cretaceous sediments of the Verkhoyansk piedmont.
Dokl. AN SSSR 157 no.1:112-115 J1 '64 (MIRA 17:8)

1. Predstavleno akademikom N.M. Strakhovym.

BIDZHIYEV, R.A.

Zonal division of Jurassic sediments in the northern part
of the Verkhoyansk piedmont. Geol. i geofiz. no.4:49-57 '65.
(MIRA 18:8)

1. Vsesoyuznyy aerogeologicheskiy trest, g. Moskva.

USSR / Plant Physiology. General.

I

Abs Jour : Rof Zhur - Biol., No 1, 1959, No 1257

Author : Bidzilya, N. I.

Inst : Not given

Title : Effect of Ultraviolet Irradiation on Plants (Report)

Orig Pub : Byul. po Fiziol. Rasteniy, No. 3, 91-96, 1958

Abstract : A survey. Bibliography with 23 titles.

Card 1/1

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AUTHORS: Vlasuk, P. A., Member, AS Ukrainian SSR, 20-119-1-17/52
Bidzilya, N. I.

TITLE: The Influence of β -Particles From Radioactive Isotopes Upon the Size Variation of the Chloroplasts of Elodea Canadensis (Vliyaniye β -chastits radioaktivnykh izotopov na izmeneniye velichiny khloroplastov Elodea canadensis)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 1, pp. 65-67 (USSR)

ABSTRACT: The present paper is devoted to an examination of the influence of β -particles of the radioactive isotopes S^{35} , Ca^{45} , W^{185} and P^{32} upon the size variation of the chloroplasts in the cells of Elodea canadensis. First the authors report shortly on previous papers dealing with the same subject. The leaves of Elodea canadensis consist of 2 layers of cells and are suited for the microscopical investigation of the chloroplasts in vivo. The Elodea culture was taken from natural waters and reared in aquariums with river sand and tap water. After 5 months from the young plants, which were reared in the

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Upon the Size Variation of the Chloroplasts of Elodea
Canadensis 20-119-1-17/52

aquariums, about equally old 7-8 cm long twigs were taken. Each 3-4 of them were put into glass containers with each 200 g of river sand and 1/2 liter of water. After a week radioactive isotopes were introduced into these containers in the form of solutions of the salts $\text{Na}_2\text{S}^{35}\text{O}_4$,

$\text{Ca}^{45}\text{SO}_4$, $\text{Na}_2\text{W}^{185}\text{O}_4$ and $\text{K}_2\text{HP}^{32}\text{O}_4$. The experiments took place in 1956 and 1957. On the control experiments also shortly is reported. The plants obtained beside the natural scattered light a daily illumination throughout 8 hours by 4 lamps of 75 watt each. Two days after the introduction of the radioactive isotopes the shape and the size of the chloroplasts in the cells of the Elodea was investigated microscopically. The results of the measurements are composed in a table. A diagram illustrates the progressing size variation of the chloroplasts. The most effective influence upon the size variation of the chloroplasts have the β -particles of W^{185} . On the 9th day after

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Canadensis

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the beginning of the β -irradiation the diameter of the chloroplasts, which were irradiated by W^{185} , increased by 40% compared with the control plants. The stable isotopes influence the size of the chloroplasts of Elodea only very insignificantly. From the results of the here discussed experiments the following results: For the biological effect of the ionizing radiation not only the quantity of the radioactive isotope and of its radiation is of importance, but also the radiation energy of its particles. The highest energy have the radiation from P^{31} and W^{185} and the biological effect of these isotopes actually is the greatest. Beside the size variation of the chloroplasts also the acceleration of the motion of the protoplasm in the cells was observed in these plants. This obviously is a consequence of the increased hydration of the protoplasm under the action of the radiation. From all the here reported facts the following preliminary conclusion can be derived: Even low doses of β -radiation of the isotopes

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The Influence of β -Particles From Radioactive Isotopes Upon the Size Variation of the Chloroplasts of Elodea Canadensis

20-119-1-17/52

S^{35} , Ca^{45} , P^{32} and W^{185} cause an increase of the size of the chloroplasts of Elodea and the radiation energy of the β -particles plays a special rôle in this case. There are 2 figures, 2 tables and 3 references, all of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy (Ukrainian Scientific Research Institute for Plant Physiology)

SUBMITTED: September 30, 1957

Card 4/4

BIDZILYA, N. I.: Master Biol Sci (diss) -- "The effect of nuclear radiations on the oxidative enzymes of plants". Kiev, 1959. 14 pp (Acad Sci Ukr SSR, Inst of Botany), 100 copies (KL, No 7, 1959, 122)

BIDZINSKI, Jerzy

Artificial refrigeration and hibernation. Neurologia etc. polska
4 no.5:545-549 Sept-Oct 54.

1. A kliniki neurochirurgii A.M. w Warszawie - kierownik prof. dr.

J.Chorobski

(HIBERNATION, artificial
ther. use, review)

BIDZINSKI, Jerzy; WRONSKI, Jerzy

Respiratory disturbances during artificial hibernation in neurosurgical cases. Neur. &c. polska 5 no.6:643-652 Nov-Dec 55.

l. Z Kliniki Neurochirurgii A.M. w Warszawie. Kierownik: prof. dr. J. Chorobski, Klinika Neurochirurgiczna, Warszawa, Oczki 6. (HIBERNATION, artif.

in neurosurg., causing resp. disord.)

(RESPIRATION
disord., during artif. hibernation in neurosurg.)
(NEUROSURGERY, anesth. and analgesia
artif. hibernation, causing resp. disord.)

BIDZINSKI, Jersy

Anesthesia in neurosurgical interventions. Neur. &c. polska
6 no.1:1-12 Jan-Feb 56.

1. Z Kliniki Neurochirurgii A. M. w Warszawie, Kierownik: prof.
dr. J. Chorobski.
(BRAIN, surgery,
anesth. (Pol))
(ANESTHESIA,
in brain surg. (Pol))

"APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205220019-0

BIDZINSKI Z., SOSNOWSKI K.

Ustawodawstwo dewizowe (Foreign currency law) by Z. Bidzinski, K. Sosnowski.
Reported in New Books (Nowe Ksiazki.) March 1, 1956.

APPROVED FOR RELEASE: 06/08/2000

CIA-RDP86-00513R000205220019-0"

BIDZINSKI, Jerzy

Neurological manifestations caused by hypoglycemia. Neur.
Ac. polska 9 no.3:327-339 Je-Jl '59.

1. Z Kliniki Neurochirurgii Akademii Medycznej w Warszawie
Kierownik: prof. dr J. Chorobski.
(HYPOGLYCEMIA compl)
(NERVOUS SYSTEM dis)

BIDZINSKI, Jerzy

A case of Avellis' bulbar hemisyndrome in uremia. Neur. &c.
polska 9 no.4:447-452 Jl-Ag '59.

1. Z Kliniki Neurochirurgii A.M. w Warszawie Kierownik: prof.
dr J. Chorobski.

(VOCAL CORD PARALYSIS compl)
(UREMIA compl)

BANACH, Stefan; BIDZINSKI, Jerzy; MAZUROWSKI, Witold

Trauma as a cause of prolapse of the nucleus pulposus of
the intervertebral disk. Chir. narzad. ruchu ortop. pol. 28
no.4:377-382 '63.

l. Z Kliniki Neurochirurgii AM w Warszawie p. o. kierownika
kliniki: prof. dr L. Stepień.
(INTERVERTEBRAL DISK DISPLACEMENT)
(WOUNDS AND INJURIES)

the following table, which gives the results of the experiments:—

Chlorostoma luteum (L.) Schubert var. *luteum* Schubert, *Flora Brasiliensis*, 1923, p. 379. Type locality: Brazil, Rio Grande do Sul, near Rio Grande.

, POLAND / Analytical Chemistry. Inorganic Analysis. E

. Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82008

Author : Rusiecki, Wladyslaw; Bidzinski, Zygmunt;
Inst : Lenicka, Joanna

Title : Not given

Title : The Use of Thio Compounds for the Detection
of Metals in Forensic Chemical Analysis

Orig Pub : Farmac. polska, 1959, 15, No 7, 113-115

Abstract : The possibility of using thioacetamide and
 Na_2CS_3 instead of H_2S in forensic chemical
analysis for the detection of Hg and As was
studied. For the detection of Hg by precipi-
tation from solutions obtained, following the
mineralization of the biological material to
be analyzed, Na_2CS_3 was found to be most useful;
thioacetamide behaves similarly to H_2S . The

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. POLAND / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82008

most complete precipitation of As as sulfide takes place when H₂S and Na₂CS₃ are used. On the basis of the data obtained, it is recommended that Na₂CS₃ be used instead of H₂S for the detection of Hg and As. -- A. Nemodruk

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L 29343-66

EMP(j)

ERT(m)

T

IJP(c)

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WW

JW

ACC NR: AF6018594

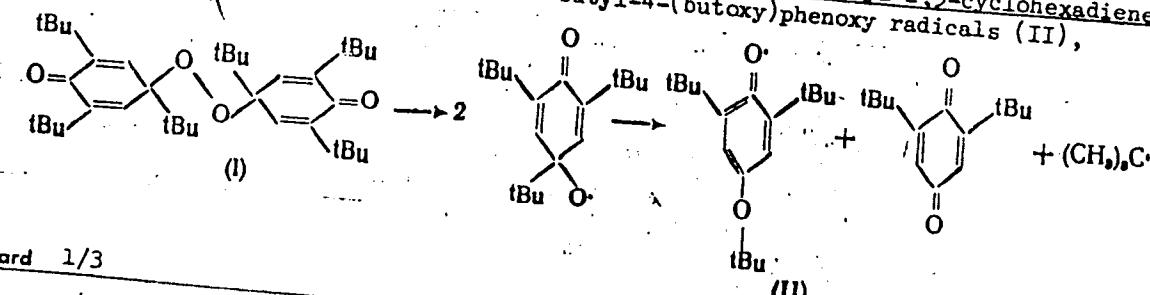
SOURCE CODE: UR/0379/66/002/002/0234/0239

AUTHOR: Pokhodenko, V. D.; Bidzilya, V. A.

ORG: Institute of Physical Chemistry im. L. V. Pisarzhevskiy, AN UkrSSR (Institut
fizicheskoy khimii AN UkrSSR)TITLE: Reaction of 2,6-di-tert-butyl-4-(butoxy)phenoxy and diphenylnitrogen radicals
with molecules containing the NH and OH groups

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 2, no. 2, 1966, 234-239

TOPIC TAGS: hindered phenol, oxidation inhibitor, electron paramagnetic resonance

ABSTRACT: The thermal decomposition of bis(1,3,5-tri-tert-butyl-2,5-cyclohexadiene-
4-one) peroxide (I) to form 2,6-di-tert-butyl-4-(butoxy)phenoxy radicals (II),

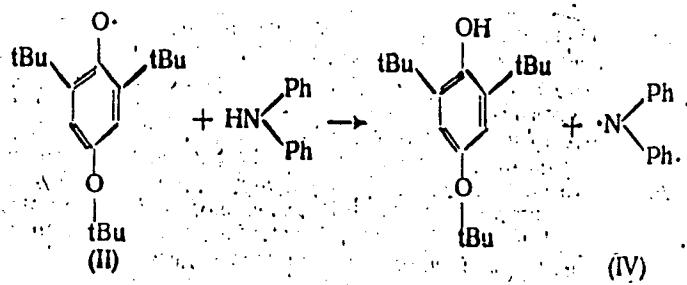
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ACC NR: AP6018594

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and the reactivity of these radicals (II) were studied by EPR spectroscopy. It is noted that the study of the reactivity of radicals formed by oxidation of hindered phenols is of both theoretical and practical interest in view of the use of these phenols as oxidation inhibitors. The thermal decomposition of I was carried out in xylene solution at 80–100°C. It was found that the thermal decomposition was a first-order reaction. It was also found that radicals (II) react with diphenylamine and 2,6-di-tert-butyl-4-methylphenol (Ionol), abstracting the hydrogen of their hydroxy groups, e.g.,



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The reverse reaction, viz., the abstraction of hydrogen by the diphenylnitrogen radical from the hydroxy groups of hindered phenols to form the corresponding phenoxy radicals was also found to occur. In this case, the diphenylnitrogen radical was prepared by the thermal dissociation of tetraphenylhydrazine in organic solvents at 100C. Orig. art. has: 3 figures. [SM]

SUB CODE: 07, 20 SUBM DATE: 20May65/ ORIG REF: 008/ OTH REF: 013/ ATD PRESS:
5009

Card 3/3 C.C.

BIEBER, B.

CHECK

J. Gravimetric determination of molybdate as cadmium molybdate. A. Jilek and B. Bieber (Benes Tech. Univ., Brno, Czech.). Acad. Trajanus, Ser. Bull. Intern., Classez sci., math., nat., et med. 52, 447-8 (1951) (Pub. 1953) (in English).—Ppt. CdMoO₄ from boiling soln. at pH 6-7 by addn. of Cd(NO₃)₂ soln., wash once with 0.1% Cd(NO₃)₂ soln., and 3 times with H₂O, and dry at 110° and then at 270° to const. wt. Excess NaNO₃ has no effect. The ions WO₄⁴⁻, CrO₄²⁻, VO₄³⁻, PO₄³⁻, and AsO₄³⁻ interfere. The use of other Cd salts gives incomplete pptn. Mo can be detd. in steel by this method after removing other cations by pptn. with Na₂CO₃. Michael Fleischr.

Břežek, Boček, Šavátek, Čech, W.

Determination of considerable aluminum in cast iron without the mercury cathode. *Rudolf Břežek and Zdeněk Václav Šavátek*, Research Inst. Materials and Foundry, Brno, Czechoslovakia. *Zpráva č. 2, 2. část, 1954, p. 100-104, T-25%*. Al in cast iron heat a sample containing 0.02-0.71 g. Al in 3.6 N H₂SO₄. Evap. on the sand bath to fume. After dilg. to 100 ml. with H₂O, filter off the SiO₂ and leucite and wash with hot dil. H₂SO₄. To the filtrate add 1 g. hydrochloric sulfate and dissolve by heating. Add 5% NaHC₂O₄ soln., dropwise to a permanent turbidity, then add 0.12-0.18 ml. excess per mg. Al (double that amount in presence of Cr). After a few min. heating on the sand or steam bath, filter off the Al(OH)₃, with some Fe(OH)₃ and Cr(OH)₃. Dissolve the washed ppt. in hot 0.1N HCl, and evap. nearly to dryness. Dissolve the residue in 25 ml. of H₂O with a few drops of HCl, add 25 ml. of 50% HOAc, and add NH₄OH until the soln. is reddish brown. To the cold soln. add 30 ml. of a 2% soln. of anitroso- β -naphthol in a 0.5 N HCl soln. to ppt. Fe, but not Al or Cr. After at least 6 hrs., filter and wash with H₂O and 50% HOAc. Evap. the filtrate after addition of 20 ml. of 40% H₂O₂ to oxidize excess anitroso- β -naphthol, on the sand bath to near dryness. Dissolve the residue in 25 ml. of 0.1N HCl and dil. to 100-150 ml. To the hot soln., add 30 ml. of 3% H₂O₂ and enough NH₄OH to make the soln. basic. Ppt. the Al(OH)₃, and oxidize Cr³⁺ to CrO₄²⁻. Heat on the steam bath for 1/2 hr., filter, and wash with hot 2% NH₄NO₃ soln. If the ppt. is green with Cr, dissolve in HCl, and repeat the pptn. Ignite at 110° and weigh.

BIEBER, B.

Determination of magnesium in spheroidal cast iron. Prace, p. 107,
SLEVARENSTVI (Ministerstvo strojirenstvi a Ministerstvo hutniho
prumyslu a rudnych dolu) Praha, Vol. 3, No. 1, Jan. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 12, December 1955

BIEBOV, B.

Chen
The Separation and Direct Determination of Titanium,
Iron and Aluminium by Means of Cupferron and Complexones
M. Z. Veselsa and B. Blábař. (Práce Českého vědecko-technického
výzkumu Štědranského (Appendix to Štědranské, 1955, 3,
(1)). [In Czech].

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GM

FIEBER, B.; VFCERA, Z.

Determination of aluminum content through electrolysis on mercury cathode after separating disturbing elements. p. 419. HUTNICKE LISTY. Brno. Vol. 10, no. 7, July 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956.

BIEBER, BOLESLAV

Czechoslovakia/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61832

Author: Bieber, Boleslav; Vecera, Zdenek

Institution: None

Title: Gravimetric Determination of Tin in Copper Alloys With the Use of Complexon III as a Masking Agent

Original Periodical: Vazkove stanoveni cinnu ve slitinach medi za pouziti komplexonu III jako maskovaciho cinidla, Slevarenstvi, 1956, 4, No 2, 48-50; Czech; Russian, German, English, and French resumés

Abstract: For determination of Sn the sample (0.5-2 g) is dissolved with heating in 30 ml HCl (1:1) and several ml 40% H₂O₂, boiled, cooled, there are added Complexon III and 10 g NH₄NO₃, diluted to 100 ml, added NH₄OH (1:1) to pH 8-9; after ~18 hours filtered, precipitate washed with hot 1% (neutralized to methyl red) solution NH₄NO₃ and calcinated. In filtrate can be determined other metals: added 10 ml concentrated H₂SO₄, 10 ml concentrated HNO₃ and 10 ml 40% H₂O₂,

Ca

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151010Z

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V 2914. Photometric determination of arsenic in
technical iron by silver diethylthiocarbamate. *Mes*
Vetra and H. Bláha. Výzkumný ústav materiálů
a technol. výroby stávárenský, Brno. *Slovansk.*
jmí, 1938, č. 368-370. The method described is
applicable to cast iron, carbon steel, pig iron.
The sample is dissolved in $HNO_3 \cdot H_2O_2$ (100 vol.)
and fumed with H_2SO_4 . Arsenic evolved is passed
into a solution of Ag diethylthiocarbamate in
pyridine, with the formation of an intense red
colour. The Beer-Lambert law is obeyed in the
range 0 to 40 μg of As per 10 ml of solution.
S.C.I. Austria.

for PM for day

BIEBER, BOLESLAV

The determination of alkalies in sands. Jan Weiss and
Boleslav Bieber (Vysokomyjsk, Bohemia, Czechoslovakia).
Svobodne 10, obec
Horní Lhotka, Vysočina, Brno, Czechoslovakia. 1953.
For the determination of alkalies in sand used in foundry
a modification of the Berzelius method was developed.
After treatment of SiO_2 with HF and H_2SO_4 the interfering
cations are removed with ammonium carbonate, ammonium
oxalate, and 8-quinolinol in ammonium medium. Alkalies
are determined gravimetrically in the filtrate as sulfates after
ignition at 750 in MgO . Petr Schneider

SIEBER, BOLESLAV

Photometric determination of arsenic in technical lead by
silver diethyldithiocarbamate. Zdenek Vojtěch, Vlastimil
Hrubý, Petr Hruška, Práce Výzkumného ústavu pro
ochranu životního prostředí, Praha.

The method is based on the reaction of arsenic with silver diethyldithiocarbamate, also by introducing H
ClO₄, and the pyridine soln. of Ag(OAc)₂. The re
action rate is 15 min with this can a const. intensity of re
action, which corresponds to the maximum absorbance at
510 m. The detection limit is 0.01 mg As. The error of the method
is about 5% and requires approximately 10 min for one analysis. The accuracy is checked by
analysing a 1 g of specimen with an As content of
0.01 percent, namely As when weighing 0.1 g. of
specimen with an As content in tenth percent.

BHM

BIEBER, BOLESLAV

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Routine total analysis of cupola slag. Boleslav Bieber
and Zdeněk Vetečka (VÚMT, výzkum olivárenský, Brno,
Czech.). *Silicništvi* 9, 73-82 (1957).—A new method of
total analysis of cupola slag in 100-120 min. has been
proposed and examined, and its time plan elaborated. SiO_2
is determined gravimetrically after evapn. with NH_4Cl , total Fe
by the photometric method with KCNS, Al_2O_3 by the
complexometric method with titration by $\text{Zn}(\text{OAc})_2$ on
Eriochrome Black T (I), TiO_2 by the photometric method
on I, CaO by the complexometric method on mixed indicator
of murexide and Naphthol Green, the total of CuO and
 MgO by the complexometric method on I, Na_2O and K_2O
by a flame photometer, S volumetrically after the decomprn.
of the sample in a Mars furnace in an O stream, and P_2O_5 by
the photometric method with molybdate and vanadate.
The proposed method reduces the time necessary for the
procedure of the total analyses of cupola slag in foundry
labs. and enables a better control of the fusion conditions
in cupolas. The method can be also used for the analyses of
silicates which decomprn. under the effect of acids having a
similar compn. to cupola slags, and for analyses of blast-fur-
nace and steel-works slags, cement, etc. 29 references.

Petr Schneider

BIEBER, BOLESLAV

Rapid determination of alkalies in foundry sands by
flame photometer. Boleslav Bláber (VÚMT, výzkum
slévárenský, Brno, Czech). Scrivener 9.2.1957. —
Sample ashed by fuming with a mixt. of HNO₃ and H₂SO₄ in
a Pt dish. After filtration Na₂O and K₂O are determined by a
flame photometer. A suitable calibrating curve has to be
prepd. with references to their interdependence and to the
content of CaO. 8 references. Peter Schneider

BIEBER, BOLESLAW

Distr: lEbj

/ Rapid analysis of cupola slag. Boleslaw Bieber and
Zdenek Vrana. Przeglad Olimpiczny 8, 66-73 (1958).—
The principles of sampling cupola slag are discussed, and
rapid methods for the detd. of all the components are out-
lined. SiO_2 is detd. gravimetrically by dissolving a sample
in HCl and evapg. the soln. in the presence of NH_4Cl ;
ferrie and ferrites oxides are detd. photometrically by using
KCNS; Al_2O_3 is detd. by titration with complexon III and
Eriochrome Cyanine T; titanium oxide is detd. photo-
metrically with H_2O_2 ; manganese oxide is detd. by titration
complexometrically with Eriochrome Cyanine T; CaO is
detd. by titration with Naphthol Green in the presence of
murexide; MgO is detd. by titration with Eriochrome
Cyanine T in the presence of NH₃. S is detd. volumetrically
after burning in a Mars furnace. The time of analysis is
reduced to 2 hrs. The accuracy and reproducibility of re-
sults are satisfactory.
A. Libacký

27
 Perchloric acid in the metallurgical laboratory. Bohuslav Břichář and Zdeněk Včelka (Státní výzkumný ústav hutního technologického výzkumu, Brno, Czech.). *Hutnické listy* 13, 837-8 (1958).—In a short survey the properties of HClO_4 , its use for analyses in the metallurgical lab., and the safety principals as well as the equipment of hoods were described. 52 references. Petr Schneider

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Inorganic Substances.

E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42100.

Author : Vecera, Z.; Bieber, B.
Inst : Not given.

Title : Photometric Determination of Boron in Technical
Iron after Decomposition of the Sample by Fusing
It with Sodium Peroxide.

Orig Pub: Hutnicke listy, 1958, 13, No 9, 808-811.

Abstract: The sample to be analyzed, in the form of chips
(0.5 g.), is carefully fused in a Ni crucible with
3 g. of Na_2O_2 , stirring it with a Ni wire. The
fusion is heated until it becomes dark-red-hot.
After cooling it is treated with water (30-40 ml.).
The mixture thus obtained is boiled for several
minutes and it is saturated with CO_2 during ~15

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Inorganic Substances.

E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42100.

Abstract: minutes until NaOH is transformed into NaHCO_3 ; 0.5-1 g. of FeSO_4 is added to reduce CrO_4^{2-} . The mixture is boiled again, mixed with pieces of filter paper, and passed through a paper filter. The deposit (compounds of Fe, Cr, Mn and Ni) is washed five times in 5-6 ml. of a hot 1% solution of NaHCO_3 and water. 10 ml. of H_2SO_4 (1:1) are added in small doses to the filtrate, evaporated in a Pe [sic!] or in a Ni cup until the salts are separated, and the mixture is diluted with water up to 25 ml. A small crystal of $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{SO}_4$, ~15 ml. of concentrated H_2SO_4 , 2 ml. of a solution of quinalizarin (0.01 g. in 100 ml. of concentrated H_2SO_4) are added to 4 ml. of the solution thus obtained. It

Card 2/3

E-11

- CZECHOSLOVAKIA / Analytical Chemistry. Analysis of Inorganic Substances. E

Abs Jour: Ref Zhur-Khim, No 12, 1959, 42100.

Abstract: is diluted with a concentrated solution of H_2SO_4 up to 25 ml. The solution is left standing for 30 minutes and measured with a photometer, using a S61 color filter in a 5 cm. vessel. The solution of the control experiment is used for comparison.
-- N. Turkevich.

Card 3/3

SEARCHED : CZECHOSLOVAKIA E
SERIALIZED : Analytical Chemistry. Analysis of Inorganic
INDEXED : Substances
FILED : Ref Časopis - Křim., No 5, 1958, No. 15085

SEARCHED : Bieber, B.; Vecera, Z.
SERIALIZED :
INDEXED : Determination of Uranium by Means of Cupferron
in the Presence of the Ammonium Salt of
Ethylenediaminetetraacetic Acid
FILED : Chem. listy, 1958, 52, No 3, 439-443

SEARCHED : A rapid gravimetric method for determination
of U (+6), based on the precipitation of U
from a neutral medium with two to threefold
excess of a 2% aqueous solution of cupferron
(C), is described. The composition of the
yellow-orange precipitate of uranyl cupferron-
ate (UC) which is being formed is expressed
by the formula $UO_2(C_6H_5N_2O_2) \cdot C_6H_5N_2O_2NH_4$. It
was established thermogravimetrically that UC

SEARCHED : 1/7

E - 18

Country	:	CZECHOSLOVAKIA	
Category	:	Analytical Chemistry. Analysis of Inorganic Substances	
Abs. Jour	:	Ref Zhur - Khim., No 5, 1959,	No. 15085
Author	:		
Institut.	:		
Title	:		
Orig. Pub.	:		
Abstract	:	preserves its composition without change within 100-130°, and changes at >600° into stable U ₃ O ₈ , which is a more convenient weight form.	
Cont'd		U (+6) can also be quantitatively precipitated within broader limits of pH (4-9) and in the presence of small quantities of CO ₃ ⁻² . By the addition of a small excess of an 0.1 M solution of the ammonium salt of ethylenediaminetetraacetic acid (EDTA), or a complexon* of EDTA, it is possible to increase to a considerable de-	
		* <u>major complex-forming agent</u>	
Card:		2/7	

Country	:	CZECHOSLOVAKIA
Category	:	Analytical Chemistry. Analysis of Inorganic Substances
Da. Jour	:	Ref Zbirr - Khim., No 5, 1959, No. 15085
Author	:	
Institut.	:	
Title	:	
Orig. Pub.	:	
Abstract	:	gree the selectivity of precipitation of UO_2^{+2} ;
Cont'd		under these conditions, precipitation of Ag^+ , Hg^{+2} , Pb^{+2} , Bi^{+3} , Cu^{+2} , Gd^{+2} , Mn^{+2} , Zn^{+2} , Co^{+2} , Ni^{+2} , Ca^{+2} , Sr^{+2} and Mg^{+2} does not occur. Fe^{+3} , Cr^{+3} , Th^{+4} and Ce^{+4} , as well as small quantities of Ti^{+4} and Zr^{+4} do not hinder the determination of U. The influence of Sb^{+3} , Sn^{+4} , Al^{+3} , Ta^{+5} and Nb^{+5} is being masked by the
Card:	3/7	

E - 19

Country	:	CZECHOSLOVAKIA
Category	:	Analytical Chemistry. Analysis of Inorganic Substances
Abs. Jour	:	Ref Zhur - Khim., No 5, 1959, No. 15085
Author	:	
Institut.	:	
Title	:	
Orig. Pub.	:	
Abstract Cont'd	:	addition of 3-5 g. of tartaric acid before the neutralization of the solution and precipita- tion of U. Great quantities of Ti^{+4} and Zr^{+4} must be removed by precipitation with the aid of C in a medium of 10% H_2SO_4 , and Be - by pre- cipitation with ammonia in the presence of ox- alic acid. Even the presence of large quanti- ties of Cl^- , SO_4^{-2} , NO_3^- , CrO_4^{-2} , MnO_4^{-2} , WO_4^{-2} , acetate, citrate and oxalate anions, as
Card:	4/7	

Country	:	CZECHOSLOVAKIA
Category	:	Analytical Chemistry. Analysis of Inorganic Substances
Res. Jour.	:	Ref Zhur - Khim., No 5, 1959, No. 15085
Author	:	
Institut.	:	
Title	:	
Orig. Pub.	:	
Abstract Cont'd	:	well as phosphate, arsenate and vanadate anions, does not hinder the determination of U if the precipitation occurs immediately after neutralization of the solution with ammonia; the presence of an excess of fluoride and carbonate does not hinder it. For the determination of U in pitchblende ores and concentrates, a sample of finely-pulverized ore (0.1-1.0 g.) is boiled with 20 ml. of concentrated HNO_3 , 10 ml. of concentrated H_2SO_4 are added, evapo-
Serial:	5/7	

E - 20

Country	:	CZECHOSLOVAKIA	E
Category	:	Analytical Chemistry. Analysis of Inorganic Substances	
Abs. Jour	:	Ref Zhur ~ Khim., No 5, 1959,	No. 15085
Author	:		
Institut.	:		
Title	:		
Ori. Pub.	:		
Abstract	:	routed in a sand bath, diluted with water, and the precipitate of SiO_2 , CaSO_4 or PbSO_4 is filtered off. To the chilled filtrate, EDTA solution is added first, and then a clear solution which has been adjusted with ammonia to pH 7-8; the precipitation of U is then effected with an excess of C. The filtered off UC is washed with 0.2% C with the addition of EDTA, dried, roasted at 800-1,000° and suspended in the form of U_3O_8 . For three samples of uranium ore, the re-	
Card:		6/7	

Country	: CZECHOSLOVAKIA	E
Category	: Analytical Chemistry. Analysis of Inorganic Substances	
Obs. Jour.	: Ref Zhir - Khim., No 5, 1959, No. 15085	
Author	:	
Institut.	:	
Title	:	
Orig. Pub.	:	
Abstract Cont'd	: sults obtained by this method differed from those obtained through precipitation of U by means of C after reduction of U to U (44) only by 0.2%, even in the most unfavorable case. In the absence of Ti and Zr, the duration of determination is 60-90 minutes.-- J. Vanecak	
Card:	7/7	

E - 21

CZECH/34-59-1-11/28

AUTHCRS: Večera, Zdeněk, RNDr, Bieber, Boleslav, Ing.Dr.

TITLE: Photometric Determination of Small P Contents in
Aluminium Alloys (Fotometrické stanovení malých
obsahů fosforu ve slitinách hliníku)

PERIODICAL: Hutnické Listy, 1959, Nr 1, pp 56-58 (Czechoslovakia)

ABSTRACT: A method was evolved for determining the P content which is present as combined aluminium phosphide in Al alloys with an accuracy of + 0.00002% P in the case of contents of 10 000ths to 100 000ths of 1% in a charge of 1 g. The method is reliable and does not impose any special demands as regards instrument and chemicals. The determination takes 1.5 to 2 hrs and is not disturbed by elements which are usually present in Al alloys. There are 3 figures, 3 tables and 23 references, 5 of which are Czech, 3 English, 1 Soviet, 7 German, 6 French, 1 Polish.

ASSOCIATION: Státní výzkumný ústav materiálu a technologie, slevárenský výzkum, Brno (State Research Institute for Materials and Technology, Foundry Research, Brno) ✓

Card 1/1

AUTHORS: Bieber, Boleslav, Engineer Doctor, Vejmálek, Bohumír,
Engineer and Veverka, Zdeněk, Doctor of Natural Sciences CZECH/34-59-8-10/16

TITLE: Determination of Carbon and Sulphur in Steel and Cast Iron
by Means of High-frequency Combustion

PERIODICAL: Hutnické listy, 1959, Nr 8, pp 700 - 706

ABSTRACT: Experiments are described for determining the carbon
and sulphur contents by means of a high-frequency generator
designed for ascertaining the carbon content by burning
in an oxygen stream, built by Siemens of Austria.
Figure 2 shows the schematic diagram of the electrical
circuit of the used HF generator. Figures 3 and 4 show
photographs of the equipment and of the combustion tube.
It was found that determination of carbon and sulphur
contents in specimens of commercially pure iron by high-
frequency burning in an oxygen stream has two considerable
advantages compared with using a Mars silite furnace,
namely, the equipment is instantaneously ready for
carrying out experiments and a very considerable saving
of electricity is achieved. The specimen, in the form of
fine chips, is charged into a combustion "boat" which is ✓

Card1/4

Determination of Carbon and Sulphur in Steel and Cast Iron by Means
of High-frequency Combustion ^{CZECH/34-59-8-10/16}

placed into a protective tube inside a horizontal quartz tube in the heating coil of the instrument. The specimen is heated as a result of the hysteresis and eddy-current losses produced by the high-frequency field and then ignites and burns off in the oxygen stream. It is assumed that during combustion the temperature reaches about 1 000 °C. Tin or rose metal proved suitable as slag-forming additions. During the process of combustion, the combustion boat and the protective tube have to withstand a considerable heat shock and of the tested materials, fireclay proved suitable. For determining the carbon content in the combustion products after high-frequency heating in an oxygen stream, the gas-metering method according to ČSN (Czech Standard Specification) 42 0510A and the weight method, according to ČSN 42 0510B proved suitable; the obtained results are in good agreement with those obtained by the current method based on using a Mars furnace. For determining the sulphur content, the iodometric method, according to ČSN 42 0514 A, was tried out;

Card2/4

✓

Determination of Carbon and Sulphur in Steel and Cast Iron by Means
of High-frequency Combustion

CZECH/34-59-8-10/16

the results were somewhat higher than those obtained under ordinary conditions of combustion in a Mars furnace at 1 350 °C and this is attributed to the higher combustion temperature at high frequency which does not leave behind sulphur residues in the molten/burnt substance. The advantages of the high-frequency combustion will manifest themselves particularly in cases in which the carbon and sulphur contents have to be determined only at irregular intervals. The cost of the high-frequency equipment is considerably higher than that of a Mars furnace. Furthermore, it necessitates using fireclay combustion "boats" and protective tubes. There are 7 figures, 5 tables and 18 references, of which 9 are Czech, 8 English, and 1 Swedish.

Card 3/4

✓

Determination of Carbon and Sulphur in Steel and Cast Iron by Means
of High-frequency Combustion CZECH 34-59-8-10/16

ASSOCIATION: Státní výzkumný ústav materiálu a technologie,
slévárenský výzkum, Brno (State Research Institute for
Materials and Technology, Foundry Research, Brno)

Card 4/4

✓ ✓

BIEBER, B.

CZECHOSLOVAKIA/Analytical Chemistry - Inorganic Analysis.

E

Abs Jour : Ref Zhur Khimiya, No 20, 1959, 71246

Author : Vecera, Zdenek; Bieber, Boleslav

Inst : -
Title : Photometric Determination of Small Amounts of
Phosphorus in Aluminum Alloys

Orig Pub : Hrtn. listy, 1959, 14, No 1, 56-58

Abstract : For the determination of P in Al alloys the formation
of the blue form of phosphomolybdc heteropolyacid
was applied. For the construction of the calibration
curve up to 0.002% P the standard $(\text{NH}_4)_2\text{HPO}_4$ solution
(2.1315 g of salt per 1 liter; 1 ml of this solution
contains 0.5 mg P) is diluted 100 times with water;
to 0.8 - 4.0 ml of the resulting solution, diluted
with water to 40 ml, 2 ml 1 N. H_2SO_4 and 5 ml ammonium
molybdate solution (made by mixing 100 ml 5% ammonium
molybdate solution with 100 ml 10 N. H_2SO_4) are added

Card 1/3

CZECHOSLOVAKIA/Analytical Chemistry - Inorganic Analysis.

E

Abs Jour

: Ref Zhur Khimiya, No 20, 1959, 71246

and the mixture extracted with butanol (45-50 ml), the extract is washed 2 times with 40 ml portions 0.5 N H_2SO_4 , shaken with 40 ml 1 N H_2SO_4 and 0.5 ml SnCl_2 solution, allowed to stand for 2-3 minutes; the organic layer is diluted with butanol to 100 ml, allowed to stand for 20 minutes, and its absorbancy measured with a photometer using 5 cm cells at 720 m μ . For the construction of the calibration curve up to 0.0005% P the standard $(\text{NH}_4)_2\text{HPO}_4$ solution is diluted 1000 times with water; 1.0-10.0 ml of the resulting solution is diluted with water to 40 ml, shaken with 2 ml 1 N H_2SO_4 , 5 ml ammonium molybdate solution and 30 ml butanol, the organic layer is washed 2 times with 30 ml portions 0.5 N H_2SO_4 , shaken with 30 ml 1 N H_2SO_4 , and 0.5 ml SnCl_2 solution, and its absorbancy measured. In the determination of P the sample (1 g) is mixed with 5 ml water,

Card 2/3

- 8 -

- CZECHOSLOVAKIA/Analytical Chemistry - Inorganic Analysis.

E

Abs Jour : Ref Zhur Khimiya, No 20, 1959, 71246

placed into the apparatus, proposed by the authors; CO₂ is passed for 10-15 minutes (to remove O₂), 25 ml HCl (1:1) is added, and the gas liberated is absorbed in bromine water (35-40 ml). Towards the end of the dissolution of the sample CO₂ is passed for another 10-15 minutes, the resulting solution is boiled to remove excess Br₂, a small crystal of Na₂SO₃ is added, the solution is boiled for another 3 minutes, and the analysis is continued as for the construction of the calibration curves. The duration of the determination is 1.5-2 hours; the error is \pm 0.00002%, Si does not interfere. -- N. Turkevich

Card 3/3

REF ID: A65101
CATEGORY : Analytical Chemistry--Analysis of inorganic substances E-1
ARS. JOUR. : RZKhim, No. 51960, No. 17514
AUTHOR : Weiss, J. and Bieber, B.
TITLE : Not given
ABSTRACT : The Determination of Small Amounts of Sodium in Silumin with a Flame Photometer
ORIG. PUB. : Muthnicke Listy, 14, No 3, 247-248 (1959)
ABSTRACT : Using a Zeiss Model III flame photometer (oxyacetylene flame, Na 59 filter), the authors have developed a method for the determination of 0.002-0.2% Na in silumin. 0.5-2.0 gms of silumin (depending on the assumed Na content) is dissolved in 20 ml HCl (1 : 1), the solution is diluted with doubly distilled water to 100 ml, and analyzed photometrically. The calibration curve is constructed using solutions containing 0-10 Na/ml and 4.3-17.2 gms of silumin AlCl₃·6H₂O [sic] per
CROSS: 1/2

COUNTRY : Czechoslovakia
CATEGORY :
1966, JUNE, : RZKHM, No. 5 1966, No. 17514
AUTHOR :
INST. :
TITLE :
ORG. PUB. :
ABSTRACT : 100 ml solution. The AlCl₃.6H₂O is subjected to a preliminary purification from Na by recrystallization from aqueous solution which is saturated with gaseous HCl; the purified AlCl₃.6H₂O solution is checked for the presence of Na by the flame photometric method.
N. Poluektov
CARD: 2/2 102

Distr: 4E2c 27

/ Determination of uranium with cupferron in the presence
of ammonium ethylenediaminetetraacetate. B. Bicher
and Z. Vcela. Collection Czechoslov. Chem. Commun. 24,
1074-9 (1959).—See C.A. 53, 1990c. M. Hudlicky.

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V

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S/137/62/000/011/035/045
A006/A101

AUTHORS: Bieber, Boleslav, Klaban, Jiří, Václavinek, Jiří, Večera, Zdeněk

TITLE: A method of protecting the surfaces of molten iron alloys against oxidation

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1962, 120, abstract
111787 P (Czechosl. Patent no. 99138 of March 15, 1961)

TEXT: The method of protecting molten Fe-alloy surfaces against oxidation consists in that low-melting B and (or) P compounds are introduced into the melt, and form on its surface a protective cover in which air-O₂ is dissolved. Chemically neutral, low-melting substances, such as NaCl or CaCl₂, may be added to the compounds to be introduced in amounts assuring a >4% content of B or P compounds in the mixture. An approximate composition of the mixture is (in %) B₂O₃ 20, NaCl or CaCl 80.

V. Levinson

[Abstracter's note: Complete translation]

Card 1/1

BIEBER, Boleslaw; VECERA, Zdenek

Complexometric simultaneous determination of calcium and magnesium.
Chem anal 6 no.1:17-22 '61. (EEAI 10:7)

1. State Research Laboratory of Raw Material and Technology, Brno,
Czechoslovakia.

(Complex compounds) (Calcium) (Magnesium)

BIEBER, B.; VECERA, Z.

Separation of calcium and magnesium in chelatometric determination.
Coll Cz chem 26 no.1:59-66 Ja '61. (EEAI 10:9)

1. Staatliches Forschungsinstitut fur Material und Technologie, Brno.

(Calcium) (Magnesium) (Chelatometry)

BIEBER, B.; VECERA, Z.

Complexometric titrations Chelatometry). Part 50: Determination
of titanium in presence of hydrogen peroxide by means of xylene
orange. Coll Cz Chem 26 no.8:2081-2084 '61.

1. Staatliches Forschungsinstitut fur Material and Technologie,
Brno.

SVEHLA, Radoslav, inz.; BIEBER, Boleslav, inz., dr.

A simple time switch for spectrographs. Hacet listy 17
no.4:291-292 Ap '62.

1. Statni vyzkumny ustav materialu a technologie,
slevarensky vyzkum, Brno.

VECERA, Zdenek, RNDr.; BIEBER, Boleslav, inz., dr.

Photometric determination of small quantities of bismuth in technical iron. Hut listy 16. o.9:667-669 S '61.

1. Statni vyzkumny ustav materialu a technologie, slevarensky vyzkum, Brno.

VECERA, Zdenek; BIEBER, Boleslav

Photometric determination of small quantities of antimony
in cast iron. Slevarenstvi 11 no.7:272-274 Jl '63.

1. Statni vyzkumny ustav materialu a technologie, Brno.

BIEBER, Boleslav, dr. inz. CSc.; VECERA, Zdenek, RNDr.

Use of the FES-1 photoelectric stylometer in metal analysis.
Hut listy 19 no.10:732-735 0 '64.

1. State Research Institute of Materials and Technology,
Welding Research, Brno.

BIEFER, Boleslav, dr. inz. CSc.; VAVRA, Vaclav, RNDr.

Use of the FEG-1 photoelectric styrometer in metal analyses.
Pt. 2. Hut listy 19 no.12:882-884 D '62.

1. Foundry Research of the State Research Institute of Materials
and Technology, Brno.

L 3761-66 EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP5027866

CZ/0034/65/000/001/0050/0052

AUTHOR: Bieber, Boleslav (Engineer, Doctor, Candidate of sciences); Vecera, Zdenek
(Doctor of natural sciences)

TITLE: Use of the photoelectric stylometer FES-1 in metal analysis. Part III. 36
Determination of Cr, Mn and Si in cast materials 35

SOURCE: Hutnické listy, no. 1, 1965, 50-52

TOPIC TAGS: metal casting, metal analysis, photoelectric detection equipment,
chromium, manganese, silicon

ABSTRACT: Method of casting a suitable sample is described. As opposing electrodes rods of pure Cu 7 mm diameter are used. Cr determination is exact, because of the high intensity of spectral lines; lines Cr 5204.52 and 5206.04 Å are used. Samples used are 20x20x40 mm and are compared with a known standard. Calibration of such a standard is described. Complete analysis takes 5 minutes. For Mn analysis sample of the same size as described and line 4823.52 Å are used; calibration curve for Mn determination is shown. Determination of Si is not easy. The best suited line is 3905.53 Å excited by an arc of 6 A, and the sample is

Cord 1/2

L 3761-66

ACC NR: AP5027866

compared to a standard ferrosilicon. Calibrating curves using samples 20x20x10 mm are shown. Total time required for analysis is 7 mins, accuracy equals gravimetric methods. Orig. art. has 6 tables, 1 figure.

ASSOCIATION: Statni vyzkumnny ustav materialu a technologie, slevarensky vyzkum, Brno
(Foundry Section, State Research Institute of Materials Technology)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, EC

NR REF Sov: 002

OTHER: 001

JPRS

PC

Card 2/2

L 34434-66 EWP(k)/EWP(h)/EWP(l)/EWP(v)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6026202

SOURCE CODE: CZ/0034/65/000/011/0808/0811

AUTHOR: Bieber, Boleslav (Engineer; Doctor; Candidate of sciences); Vecera, Zdenek 28
(Doctor of natural sciences) 5

ORG: State Research Institute of Materials--Foundry Research, Brno (Statni vyzkumny
ustav materialu, slevarensky vyzkum) 14

TITLE: Use of the FES-1 photoelectric stylometer in analyses of metals. IV.
Determination of aluminum, molybdenum, vanadium, titanium and copper in cast iron 4

SOURCE: Hutnicke listy, no. 11, 1965, 808-811

TOPIC TAGS: cast iron, photoelectric cell, metal chemical analysis

ABSTRACT: The article gives details of a method used to determine aluminum,
molybdenum, vanadium, titanium and copper in cast irons and fused specimens of
cast iron with the FES-1 stylometer. The results are presented in tabular form
and are discussed. Orig. art. has: 10 tables. [JPRS: 33,732]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 002

Card 1/1 01/08

ACC NR: AP6026072

SOURCE CODE: Cz/0034/65/000/012/0888/0889

AUTHOR: Vecera, Zdenek (Doctor of natural sciences); Bieber, Boleslav (Engineer;
Doctor; Candidate of sciences)

ORG: Foundry Research Department, State Research Institute for Construction Materials, Brno (Statni vyzkumny ustav materialu, Slevarensky vyzkum)

TITLE: Photometric determination of small amounts of lead in cast iron

SOURCE: Hutnické listy, no. 12, 1965, 888-889

TOPIC TAGS: cast iron, photometric analysis, lead, chemical reduction, colorimetric analysis, quantitative analysis, metal purification

ABSTRACT: The sample is dissolved in hydrochloric acid and the iron removed by extraction with methylisobutyl ketone and isoamyl acetate. Hydrochloric acid is evaporated, tartrate and cyanide are added, and lead is reduced by ascorbic acid in an ammoniacal medium. After the addition of cupral, lead is extracted by absorbing it in carbon tetrachloride. Addition of copper sulfate produces a copper salt of cupral. The resulting brown coloring is measured colorimetrically. The accuracy of the determination is $\pm 0.0002\%$ when the Pb content is in thousandths of a %, and $\pm 0.001\%$ when the lead content is in the hundredths of a %. The amount weighed out is 1 g. Pb can be determined even in the presence of some of the alloying metals. Orig. art. has: 3 tables. [JPRS: 34,272]

SUB CODE: 11, 07, 20 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 010

Card 1/1 82

0916

1100

L 38593-66 EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c) JD/WW/JG
ACC NR: AP6027705 SOURCE CODE: CZ/0034/66/000/001/0050/0052

AUTHOR: Bieber, Boleslav (Engineer; Doctor; Candidate of sciences); Drexlorova, Jindra

ORG: State Research Institute for Materials, Research in Welding, Brno (Statni vyzkumny ustav materialu, Slevarensky vyzkum)

TITLE: Spectrophotometric analysis of metals using the instrument stilometer FES-1.
Determination of small amounts of Cr, Ti, Al, and Mg in the production of ductile cast iron

SOURCE: Hutnické listy, no. 1, 1966, 50-52

TOPIC TAGS: metal analysis, spectrophotometric analysis, cast iron, line spectrum, spectrum analyzer/FES-1 spectrumanalyzor

ABSTRACT: The authors investigated determination of small amounts of metals that could be found in the manufacture of ductile cast iron. Details of the spectrum lines that are used in the analysis of individual metals are given. Calibration curves for the instrument are discussed. Orig. art. has: 8 tables. [JPRS: 34,519]

SUB CODE: 11, 20 / SUBM DATE: none / ORIG REF: 001

Card 1/1 ✓

BIEBL, KONSTANTIN.

GEOGRAPHY & GEOLOGY

BIEBL, KONSTANTIN. Cesta na Javu. Praha, Ceskoslovensky spisovatel. 133 p.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959.
Unclassified

BIEBOLD, N.

Verralux photometer, p. 82, KEP ES HANGTECHNIKA, (Optikai es Kinotech-nikai Tudomanyos Egyesulet) Budapest, Vol. 2, No. 3, June 1956

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 11, November 1956

Biechonski, J.

Biechonski, J. The "Polish Flat" which was not Polish. p. 471.

Vol. 10, no. 15, July 1956

SVET MOTORU

TECHNOLOGY

Czechoslovakia

So: East European Accessions, Vol. 6, May 1957

No. 5

BIEDA, FRANCISZEK.

Bieda, Franciszek. - Historia paleontologii w Polsce. Krakow, Nakl. Polskiej Akademii Umiejetnosci; skl. gl. w ksieg. Gebethnera i Wolfffa, 1948 37 p. (Polska Akademia Umiejetnosci. Historia nauki polskiej w monografiach, 10) History of paleontology in Poland. French summary

SO: Monthly List of East European Accessions, L.C., Vol. 3, No. 4, April, 1954

BIEDA, F.

"Present state of micropaleontology of the Carpathian Flysch," Przeglad Geologiczny, Warszawa, No 3, June 1953, p. 89.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

BIEDA, F.

"Research on large foraminifers of the Upper Eocene of the Carpathian Mountains."

p. 203 (Rocznik) Vol. 25, no. 3, 1955 (published 1957)
Krakow, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

STUDY, P.

Large foraminifers found in the Carpathian Flysch. p. 268

SO: East European Accessions List (FEAL). LC. Vo. 4 N. 11 Nov. 1955 uncl.

BIEADA, F.

The fauna of large foraminifera of the Upper Neocene in Slovakia, p. 28.
(Geologicky Sbornik, Vol. 8, no. 1, 1957. Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EMAL) 1C, Vol. 6, no. 10, October 1957. Uncl.

BIEBA, F.

Remarks on Janina Sztejn's article "History of Polish Micropaleontology." p. 247

KOMIS. SEJNA R: PAMIĘTA NIKIEMICHA. (Polskie Towarzystwo Przyrodników im. Kopernika) Warszawa, Poland. Vol. 5, no. 3., 1959.

Monthly list of East European Accession (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

BIEDA, F.

Paleontology and evolution. p. 285.

WSZECHŚWIAT. (Polskie Towarzystwo Przyrodnikow im. Kopernika)
Warszawa, Poland.
No. 11, Nov. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

BIEDA, Franciszek; ZYTKO, Kazimierz

Notes on the stratigraphy of the Magura series in the surroundings
of Milowka in the south of Zywiec. Kwartalnik geol 4 no.3:772-786
'60.

1. Katedra Paleontologii Akademii Gorniczo-Hutniczej i Karpacka
Stacja Terenowa Instytutu Geologicznego w Warszawie.

BIEDA, Franciszek

Fiftieth anniversary of the foundation of the Paleontological
Laboratory of the Jagiellonia University, Krakow. Rocznik geol
Krakow 32 no.4:623-628 '62.

1. Katedra Paleontologii, Akademia Gorniczo-Hutnicza, Krakow.

BIEDA, Franciszek

Foundation of the first geologic station in the Carpathians in
1912. Rocznik Krakow 32 no.4:629-631 '62.

1. Katedra Paleontologii, Akademia Gorniczo-Hutnicza,
Krakow.

BIEDA, Franciszek

Seventh level of large Foraminifera in the Flysch of the Polish
Carpathians. Rocznik geologiczny Krakow 33 no.1/3:188-218 '63.

1. Katedra Paleontologii, Akademia Gorniczo-Hutnicza, Krakow.

BIEDA, Franciszek

Limestone facies in the Upper Eocene Flusich of the Polish
Carpathians. Rocznik geologiczny Krakow 32 no. 3:399-414 '62

1. Katedra Paleontologii, Akademia Gorniczo-Hutnicza, Krakow .

BIEADA, Franciszek

Fortieth anniversary of the Polish Geological Society,
1921-1961. Rocznik Krakow 32 no.1:119-140 '62

BIEUDA, Franciszek

Roman Kengiel, 1904-1960. Rocz. geol. Krakow 34 no. 1: 605-611. 1961.

BIEDA, S.; FOCHEM, K.

Role of roentgenodiagnosis in obstetrics. Ginek. Pol. 33 no.2:153-159
'62.

1. Z I Kliniki Chorob Kobiecyh Uniwersytetu w Wiedniu Kierownik
Kliniki: prof. dr T. Antoine.

(OBSTETRICS) (RADIOGRAPHY)

BIEDA, S.; FOCHEM, K..

Role of the anterior height of the pelvis in labor prognosis. Ginek.
pol. 33 no.6:717-722 '62.

1. Z I Kliniki Chorob Kobiecych Uniwersytetu w Wiedniu Kierownik Kliniki:
prof. dr T. Antoine.
(PELVIMETRY)